

(BSP June 26, 2000)

Masonry Materials

Concrete Masonry Units

Concrete masonry units (CMU) shall conform to ASTM C 90, Grade N, Type 1, with a density between 100 and 115 pounds per cubic foot. Shrinkage shall not exceed 0.065 percent.

All CMU's shall contain a water repellent admixture in accordance with the admixture manufacturer's recommendations. The water repellent admixture shall be "Dry-Block System" by W. R. Grace Company, or an approved equal.

All CMU's shall be standard manufactured units with nominal face dimensions of eight inches high and 1'-4" long. The CMU block thickness shall be eight inches, unless otherwise shown in the Plans. Special shapes shall be provided to complete the work as shown in the Plans.

CMU surface texture and color shall be as follows:

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All CMU's shall be of uniform texture and color, obtained from one source. The Contractor shall submit four samples of each type of CMU block specified for use on the project to the Engineer for approval.

The Contractor shall submit a certificate of compliance from the CMU manufacturer to the Engineer, in accordance with Section 1-06.3, certifying compliance with the specified requirements. The submittal shall include test results as required from tests conducted within the previous twelve months.

CMU Grout

CMU grout shall conform to ASTM C 476, with a six sack minimum mix and 3/8 inch aggregate. The CMU grout shall have a minimum 28 day compressive strength of 1,800 psi and a slump of ten inches.

Mortar

Portland cement shall be Type 1 conforming to Section 9-01.2(1).

Masonry cement shall conform to ASTM C 91.

Aggregate shall conform to AASHTO M 45.

Hydrated lime shall conform to ASTM C 207.

Water shall conform to Section 9-25.1.

The mortar shall conform to ASTM C 270, Type S, and shall be mixed in accordance with one of the following mix proportions:

	Alt. 1	Alt. 2
Portland Cement	1 part	1/2 part

1	Masonry Cement	-	1 part
2	Hydrated Lime	1/4 to 1/2 part	-
3	Aggregate	4-1/2 parts	4-1/2 parts

4
5 The proportions of damp, loose aggregate for both alternative mixes
6 shall be not less than 2-1/4 times nor greater than 3 times the sum of
7 the volumes of cement and lime used.

8
9 The minimum compressive strength at 28 days shall be 1,800 psi.

10
11 The mortar mixture shall include a water repellent integral admixture, mixed
12 in accordance with the admixture manufacturer's recommendations. The
13 water repellent integral admixture shall be "Dry-Block System" by W. R.
14 Grace Company, or an approved equal.

15
16 To ensure uniform color, texture, and quality, all mortar mix components
17 shall be obtained from one manufacturer for each component, and from
18 one source and producer for each aggregate.

19
20 **Parge Coating**

21 The parge coating applied to the top of the assembled CMU wall shall be
22 one of the following waterproof cement base coatings:

- 23
24 1. Thoroseal, manufactured by Thoro.
25 2. Fabriseal, manufactured by Fabrikem.
26 3. Tamoseal, manufactured by Tamms.